## **CLAIMS**

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- 1. A preparative separation process wherein (-)- $\Delta^9$ -trans-tetrahydrocannabinol is separated from a mixture of cannabinoids, wherein the process comprises at least one chromatographic step wherein a mobile phase passes through a stationary phase, characterised in that the stationary phase comprises a derivatised polysaccharide and the mobile phase comprises carbon dioxide.
- 2. A process according to claim 1, wherein the mobile phase is a mixture of carbon dioxide and one or more modifiers.
  - 3. A process according to claim 2, wherein the mobile phase is a mixture of carbon dioxide and ethanol.
- 15 4. A process according to claim 2 or claim 3, wherein the ratio of carbon dioxide to liquid modifier is in the range 95:5 to 75:25.
  - 5. A process according to any preceding claim, wherein the derivatised polysaccharide is immobilised on a substrate chosen from silica gel, zirconium, alumina, ceramics and other silicas.
    - 6. A process according to any preceding claim, wherein the stationary phase comprises an amylosic polysaccharide.
- 7. A process according to claim 6, wherein the stationary phase is amylose tris(3,5-dimethylphenylcarbamate) supported on macroporous silica gel.
  - 8. A process according to any preceding claim, wherein the process comprises a further chromatographic step wherein a mobile phase passes through a stationary phase, wherein the stationary phase is an achiral stationary phase.
  - 9. A process according to claim 8, wherein the achiral stationary phase is 2-ethylpyridine siloxane immobilised on a silica support.

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- 10. A process according to claim 8 or claim 9, wherein a first chromatographic step uses the achiral stationary phase and a second chromatographic step uses the stationary phase comprising a derivatised polysaccharide.
- 5 11. A process according to claim 8 or claim 9, wherein a first chromatographic step uses the stationary phase comprising a derivatised polysaccharide and a second chromatographic step uses the achiral stationary phase.
- 12. A process for preparing a pharmaceutical product comprising (-)-Δ<sup>9</sup>-THC,
  10 wherein the process comprises a first step wherein (-)-Δ<sup>9</sup>-THC is separated from a mixture of cannabinoids by a process according to any preceding claim, and a further step wherein the (-)-Δ<sup>9</sup>-THC is combined with pharmaceutical carriers to form the pharmaceutical product.